CLAIMS

1. (Amended) A plasm display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass that contains at least ZnO and 10 wt% or less of R_2O and does not substantially contain PbO and Bi_2O_3, and a product of permittivity ε and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of Li, Na, K, Rb, Cs, Cu, and Ag.

2. The plasm display panel of Claim 20, wherein

the permittivity ε of the dielectric layer is 7 or less.

3. The plasm display panel of Claim 20, wherein

the dielectric layer contains 10-25 wt% of P_2O_5, 20-35 wt% of ZnO, 30-40 wt% of B_2O_3, 5-12 wt% of SiO_2, 10 wt% or less of R_2O, and 10 wt% or less of DO, and the permittivity ε of the dielectric layer is 7 or less, wherein D is selected from a

group consisting of Mg, Ca, Ba, Sr, Co, Cr, and Ni.

4. The plasm display panel of Claim 1, wherein

the dielectric layer is composed of a $ZnO-P_2O_5$-base glass which contains 42-50 wt% of P_2O_5, 35-50 wt% of ZnO, 7-14 wt% of Al_2O_3, and 5 wt% or less of Na_2O, and the permittivity ε of the dielectric layer is 7 or less.

5. The plasm display panel of Claim 1, wherein

the dielectric layer is composed of a ZnO-base glass which contains 20-44 wt% of ZnO, 38-55 wt% of B_2O_3, 5-12 wt% of SiO_2, 10 wt% or less of R_2O, and 10 wt% or less of MO, and the permittivity ε of the dielectric layer is 7 or less, wherein R is selected from a group consisting of Li, Na, K, Rb, Cs, Cu, and Ag, and M is selected from a group consisting of Mg, Ca, Ba, Sr, Co, and Cr.

6. The plasm display panel of Claim 1, wherein

the dielectric layer is composed of a ZnO-base glass which contains 20-43 wt% of ZnO, 38-55 wt% of B_2O_3, 5-12 wt% of SiO_2, 1-10 wt% of Al_2O_3, 10 wt% or less of R_2O, and 10 wt% or less of MO, and the permittivity ε of the dielectric layer is 7 or less, wherein R is selected from a group consisting of Li, Na, K, Rb, Cs, Cu, and Ag, and M is selected from a group consisting of Mg, Ca, Ba, Sr, Co, and Cr.

7. The plasm display panel of Claim 1, wherein

the dielectric layer is composed of a ZnO-base glass which contains 1-15 wt% of ZnO, 20-40 wt% of B_2O_3, 10-30 wt% of SiO_2, 5-25 wt% of Al_2O_3, 3-10 wt% of Li_2O, and 2-15 wt% of MO, and the permittivity ε of the dielectric layer is 7 or less, wherein M is selected from a group consisting of Mg, Ca, Ba, Sr, Co, and Cr.

8. The plasm display panel of Claim 1, wherein

the dielectric layer is composed of a ZnO-base glass which contains 35-60 wt% of ZnO, 25-45 wt% of B_2O_3, 1-10.5 wt% of SiO_2, 1-10 wt% of Al_2O_3, and 5 wt% or less of Na_2O, and the permittivity ε of the dielectric layer is 7 or less.

9. The plasm display panel of Claim 1, wherein

the dielectric layer is composed of a ZnO-base glass which contains 35-60 wt% of ZnO, 25-45 wt% of B_2O_3, 1-12 wt% of SiO_2, 1-10 wt% of Al_2O_3, and 5 wt% or less of K_2O, and the permittivity ε of the dielectric layer is 7 or less.

10. The plasma display panel of Claim 1, wherein

the dielectric layer is composed of a ZnO-Nb_2O_5-base glass which contains 9-19 wt% of Nb_2O_5, 35-60 wt% of ZnO, 20-38 wt% of B_2O_3, 1-10.5 wt% of SiO_2, and 5 wt% or less of Li_2O, and permittivity ε of the dielectric layer is 7 or less.

11. (Amended) A plasm display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 20-30 wt% of P_2O_5, 30-40 wt% of ZnO, 30-45 wt% of B_2O_3, and 1-10 wt% of SiO_2 and a product of permittivity ε and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less.

12. (Amended) A plasm display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 30-45 wt% of ZnO, 40-60 wt% of B_2O_3, and 1-15 wt% of SiO_2 and a product of permittivity ε and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less.

13. (Amended) A plasm display panel in which a space between a

first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 30-45 wt% of ZnO, 40-55 wt% of B_2O_3, 1-10 wt% of SiO_2, 1-10 wt% of Al_2O_3, and 1-5 wt% of CaO, and a product of permittivity ε and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less.

14. (Amended) A plasm display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 40-60 wt% of ZnO, 35-45 wt% of B_2O_3, 1-10 wt% of SiO_2, and 1-10 wt% of Al_2O_3, and a product of permittivity ε and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less.

15. (Amended) A plasm display panel in which a space between a

first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 30-60 wt% of ZnO, 30-50 wt% of B_2O_3, 1-10 wt% of SiO_2, and 1-10 wt% of Al_2O_3, and a product of permittivity ε and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less.

16. (Amended) A plasm display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 9-20 wt% of Nb_2O_5, 35-60 wt% of ZnO, 25-40 wt% of B_2O_3, and 1-10 wt% of SiO_2, and a product of permittivity ε and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less.

17. (Amended) A plasm display panel in which a space between a first plate and a second plate facing each other is filled with

a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is composed of

a first dielectric layer which either is a thin film of SiO_2, Al_2O_3 or ZnO or is made of a glass containing at least PbO or Bi_2O_3 and covers the plurality of pairs of display electrodes, and

a second dielectric layer made of a glass in which a product of permittivity ε and loss factor $\tan\delta$ is 0.12 or less, the second dielectric layer covering the first dielectric layer.

18. The plasm display panel of Claim 17, wherein

the second dielectric layer contains is made of a glass that at least ZnO and 10 wt% or less of R_2O and does not contain PbO and Bi_2O_3, wherein R is selected from a group consisting of Li, Na, K, Rb, Cs, Cu, and Ag.

19. The plasm display panel of Claim 17, wherein

a total thickness of the dielectric layer is 40 μm or less, and a thickness of the first dielectric layer is half of the total thickness or less.